WHAT IS CLAIMED IS:

1. A method in a data processing system for validating digital certificates, comprising:

receiving an online certificate status protocol request associated with a digital certificate;

creating a Lightweight Directory Access Protocol database query based on the received request;

sending the Lightweight Directory Access Protocol database query to determine whether the digital certificate is valid; and

receiving a database query result indicating whether the digital certificate is valid.

2. The method of claim 1, further including sending an indication of whether the digital certificate is valid based upon the received database query result.

3. The method of claim 1, wherein the data processing system has a certificate authority and an associated database, and wherein the method further comprises:

sending an indication of a new digital certificate from the certificate authority to the database upon issuance of the new digital certificate;

receiving, by the database, from the certificate authority, an indication of the new digital certificate; and

storing a database record reflecting an identity of the new digital certificate.

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4. The method of claim 1, wherein the data processing system has a certificate authority and an associated database, and wherein the method further comprises:

sending an indication of a revoked digital certificate from the certificate authority to the database upon revocation of the revoked digital certificate;

receiving, by the database, from the certificate authority, the indication of revocation of the revoked digital certificate; and

removing a database record of an identity of the revoked digital certificate.

5. A method in a data processing system for validating digital certificates, the data processing system having a certificate authority and an associated database, the method comprising:

receiving, by a database, a Lightweight Directory Access Protocol query based on an online certificate status protocol request indicating a requested digital certificate;

searching the database for a database record reflecting an identity of the requested digital certificate; and

returning an indication of the database record when the database record reflecting the requested digital certificate is found to indicate validity of the requested digital certificate, whereby the indication of the database record is returned without transmission of a certificate revocation list by the certificate authority.

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6. The method of claim 5, further comprising the step of:

sending an indication of a new digital certificate from the certificate authority to the database upon issuance of the new digital certificate;

receiving, by the database from the certificate authority, an indication of the new digital certificate upon issuance of the new digital certificate; and

storing a database record reflecting an identity of the new digital certificate.

7. A method in a data processing system for validating digital certificates without certification revocation lists, comprising:

receiving an online certificate status protocol request associated with a digital certificate;

creating a database query based on the received request;

sending the database query to determine whether the digital certificate is valid; and

receiving a database query result indicating whether the digital certificate is valid.

8. The method of claim 7, wherein the database query is a Lightweight Directory Access Protocol database query.

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9. A method in a data processing system for validating digital certificates without certification revocation lists, the data processing system having a certificate authority and an associated database, the method comprising:

receiving, by the database, a query based on an online certificate status protocol request indicating a requested digital certificate;

searching the database for a database record reflecting an identity of the requested digital certificate; and

returning an indication of the database record when the database record reflecting the requested digital certificate is found to indicate validity of the requested digital certificate.

10. The method of claim 9, further comprising the step of:

sending an indication of the new digital certificate from the certificate authority to the database upon issuance of the new digital certificate;

receiving, by the database from the certificate authority, an indication of a new digital certificate upon issuance of the new digital certificate; and

storing a database record reflecting an identity of the new digital certificate.

11. The method of claim 9, wherein the received query is a Lightweight Directory Access Protocol query.

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12. A method in a data processing system for validating digital certificates without certification revocation lists, the data processing system having a client, a server, an OCSP responder, a database, and a certificate authority, the method comprising:

sending a request from the client for a transaction, the request including a digital certificate identifying the client;

receiving the client request by the server;

creating, by the server, an online certificate status protocol request based on the associated digital certificate identifying the client;

sending the online certificate status protocol request by the server;

receiving, by the OCSP responder, the online certificate status protocol request associated with the digital certificate;

creating a Lightweight Directory Access Protocol database query based on the received online certificate status protocol request;

sending the Lightweight Directory Access Protocol database query to the database to determine whether the digital certificate is valid, the database storing records of valid certificates of the certificate authority;

searching the database for a database record identifying the digital certificate associated with the online certificate status protocol request;

returning a LDAP database query result indicating whether the digital certificate is valid; and

receiving the returned LDAP database query result.

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13. A data processing system for answering online certificate status requests without certificate revocation lists, comprising:

a memory having program instructions;

a processor configured to execute the program instructions to receive an online certificate status protocol request associated with a digital certificate, create a database query based on the received request, send the Lightweight Directory Access Protocol database query to determine whether the digital certificate is valid, and receive a Lightweight Directory Access Protocol database query result indicating whether the digital certificate is valid.

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14. A data processing system for answering online certificate status requests without certificate revocation lists, comprising:

a first computer having:

a memory having program instructions;

a processor configured to execute the program instructions to receive an online certificate status protocol request associated with a digital certificate, create a database query based on the received request, send the database query to determine whether the digital certificate is valid, and receive a database query result indicating whether the digital certificate is valid; and

a second computer representing a directory server having:

a database storing database records indicating digital certificates;

a memory having program instructions;

a processor configured to execute the program instructions to receive, from a certificate authority, an indication of a new digital certificate upon issuance of the new digital certificate, store a database record reflecting an identity of the new digital certificate, receive the database query based on the online certificate status protocol request from the first computer, search the database for a database record reflecting an identity of the requested digital certificate; and return an indication of the database record to the first computer when the database record reflecting the requested digital certificate is found to indicate validity of the requested digital certificate.

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15. The data processing system of claim 14, wherein the database query is an LDAP query.

16. A data processing system for answering online certificate status requests without certificate revocation lists, comprising:

a client computer configured to send a request for a transaction, the request including a digital certificate identifying the client;

a server computer configured to receive the client request, create an online certificate status protocol request based on the associated digital certificate identifying the client, and send the online certificate status protocol request;

an OCSP responder configured to receive the online certificate status protocol request associated with the digital certificate, create a Lightweight Directory Access Protocol database query based on the received online certificate status protocol request, and send the Lightweight Directory Access Protocol database query to a database to determine whether the digital certificate is valid, the database storing records of valid certificates of the certificate authority; and

a database configured to search for a database record identifying the digital certificate associated with the online certificate status protocol request, return an LDAP database query result indicating whether the digital certificate is valid.

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17. A computer-readable medium containing instructions for controlling a data processing system to perform a method for validating digital certificates comprising the steps of:

receiving an online certificate status protocol request associated with a digital certificate;

creating a Lightweight Directory Access Protocol database query based on the received request;

sending the Lightweight Directory Access Protocol database query to determine whether the digital certificate is valid; and

receiving a database query result indicating whether the digital certificate is valid.

18. The computer-readable medium of claim 17, wherein the method further comprises sending an indication of whether the digital certificate is valid based upon the received database query result.

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19. The computer-readable medium of claim 17, wherein the data processing system has a certificate authority and an associated database, and wherein the method further comprises:

sending an indication of a new digital certificate from the certificate authority to the database upon issuance of the new digital certificate;

receiving, by the database, from the certificate authority, an indication of the new digital certificate; and

storing a database record reflecting an identity of the new digital certificate.

20. The computer-readable medium of claim 17, wherein the data processing system has a certificate authority and an associated database, and wherein the method further comprises:

sending an indication of a revoked digital certificate from the certificate authority to the database upon revocation of the revoked digital certificate;

receiving, by the database, from the certificate authority, the indication of revocation of the revoked digital certificate; and

removing a database record of an identity of the revoked digital certificate.

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21. A computer-readable medium containing instructions for controlling a data processing system to perform a method for validating digital certificates, the data processing system having a certificate authority and an associated database, the method comprising the steps of:

receiving, by a database, a Lightweight Directory Access Protocol query based on an online certificate status protocol request indicating a requested digital certificate;

searching the database for a database record reflecting an identity of the requested digital certificate; and

returning an indication of the database record when the database record reflecting the requested digital certificate is found to indicate validity of the requested digital certificate, whereby the indication of the database record is returned without transmission of a certificate revocation list by the certificate authority.

22. The computer-readable medium of claim 21, wherein the method further comprises the steps of:

sending an indication of a new digital certificate from the certificate authority to the database upon issuance of the new digital certificate;

receiving, by the database from the certificate authority, an indication of the new digital certificate upon issuance of the new digital certificate; and

storing a database record reflecting an identity of the new digital certificate.

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23. A computer-readable medium containing instructions for controlling a data processing system to perform a method for validating digital certificates without certification revocation lists comprising the steps of:

receiving an online certificate status protocol request associated with a digital certificate;

creating a database query based on the received request;

sending the database query to determine whether the digital certificate is valid; and

receiving a database query result indicating whether the digital certificate is valid.

24. The computer-readable medium of claim 23, wherein the database query is a Lightweight Directory Access Protocol database query.

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25. A computer-readable medium containing instructions for controlling a data processing system to perform a method for validating digital certificates without certification revocation lists, the data processing system having a certificate authority and an associated database, the method comprising the steps of:

receiving, by the database, a query based on an online certificate status protocol request indicating a requested digital certificate;

searching the database for a database record reflecting an identity of the requested digital certificate; and

returning an indication of the database record when the database record reflecting the requested digital certificate is found to indicate validity of the requested digital certificate.

26. The computer-readable medium of claim 25, wherein the method further comprises the steps of:

sending an indication of the new digital certificate from the certificate authority to the database upon issuance of the new digital certificate;

receiving, by the database from the certificate authority, an indication of a new digital certificate upon issuance of the new digital certificate; and

storing a database record reflecting an identity of the new digital certificate.

27. The computer-readable medium of claim 25, wherein the received query is an Lightweight Directory Access Protocol query.

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28. A computer-readable medium containing instructions for controlling a data processing system to perform a method for validating digital certificates without certification revocation lists, the data processing system having a client, a server, an OCSP responder, a database, and a certificate authority, the method comprising the steps of:

sending a request from the client for a transaction, the request including a digital certificate identifying the client;

receiving the client request by the server;

creating, by the server, an online certificate status protocol request based on the associated digital certificate identifying the client;

sending the online certificate status protocol request by the server;

receiving, by the OCSP responder, the online certificate status protocol request associated with the digital certificate;

creating a Lightweight Directory Access Protocol database query based on the received online certificate status protocol request;

sending the Lightweight Directory Access Protocol database query to the database to determine whether the digital certificate is valid, the database storing records of valid certificates of the certificate authority;

searching the database for a database record identifying the digital certificate associated with the online certificate status protocol request;

returning a LDAP database query result indicating whether the digital certificate is valid; and

receiving the returned LDAP database query result.

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29. A data processing system for validating digital certificates, comprising:

means for receiving an online certificate status protocol request associated with a digital certificate;

means for creating a Lightweight Directory Access Protocol database query based on the received request;

means for sending the Lightweight Directory Access Protocol database query to determine whether the digital certificate is valid; and

means for receiving a database query result indicating whether the digital certificate is valid.

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